



1 channel radio external receiver

miniPLUTO2 **CE** REV 0

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FOLLOW THIS INSTRUCTIONS CAREFULLY !! This manual contains important instructions for installation and use of this radio external receiver mod. 'MINIPLUTO2'. Don't install before reading this manual, the product's security depends on a correct installation. The installation must be done by qualified technicians. The external receiver must have a special box to protect from water infiltration or damp. The external receiver mustn't be exposed to sources of heat or electromagnetic fields. Install the external receiver in airy place and far from inflammable material. The producing company declines any responsibility in case of a not correct installation or improper use.

SYMBOLS

	IMPORTANT !!
	IMPORTANT for safety installation

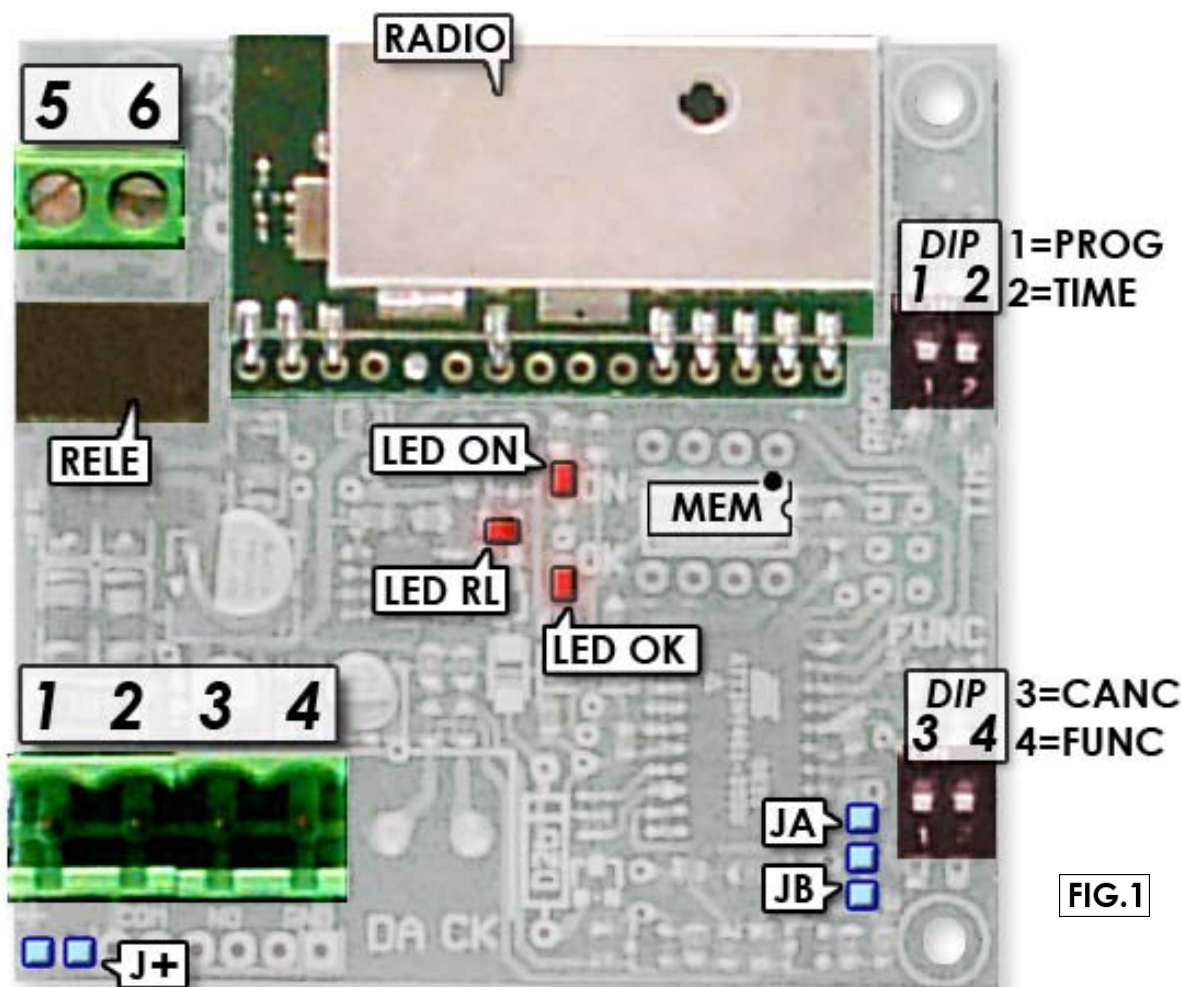


FIG.1

MINIPLUTO2 radio external receiver:

The radio external receiver mod. MINIPLUTO2 has a radio channel with free voltage contact

- It's easy installation . It has a BASE factory program (see pag.3).
- It has a lot of functions , it's suitable for every installation.
- The memory : n. 77 standard-codes and n. 29 rolling-codes. it's possible to have n. 5325 standard-codes or n. 1997 Rolling-codes with a removable memory (see point {7}).

! IMPORTANT

RADIO EXTERNAL RECEIVER CONNECTION



ATTENTION !!!

All the wiring connections must be done after to have disconnected the main alimentation !
DISCONNECT THE GENERAL BUTTON before every connection !!

CONNECTION FOR ALIMENTATION 24V_{ac}/V_{cc}

ALIMENTATION	TERMINALS' CONNECTION
24V_{AC}	Connect to Terminals 1 and 4
24V_{CC}	positive pole: terminal 1 ground: terminal 4

when the receiver is connected at 24V of tension, the bridge [J+] it has to be open (no solder)

CONNECTION FOR OUTPUT CHANNEL

CHANNEL	TERMINALS' CONNECTION
CH1 "N.O." free voltage contact MAX: 100V 1A	Connect to Terminals 2 and 3

CONNECTION FOR EXTERNAL ANTENNA

ACCESSORY	TERMINALS' CONNECTION
EXTERNAL ANTENNA With shielded wire It improves the radio reception of receiver. The antenna must be installed high 2m and far from electromagnetic interferences.	The SHIELDED WIRE must be connected to terminal 5 . The HOT POLE must be connected to terminal 6

MODIFY FOR

ALIMENTATION 12V

It's possible to make a modify to the radio external receiver to work with tension 12V_{ac} or 12V_{cc}



ATTENTION !!!
AFTER TO HAVE DONE THE MODIFY , DON'T GIVE AN ALIMENTATION TO 24V.

This modify can be done ONLY if you need an alimentation to 12V.

PROCEDURE

1) Disconnect the radio external receiver and solder the bridge [J+]

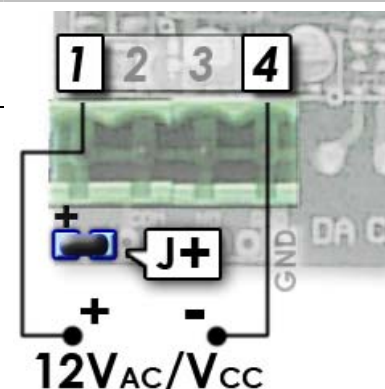
2) Connect the radio external receiver and give **ONLY 12V_{cc} or 12V_{ac} tension.**



REMOVE THE MODIFY!

If you need 24V tension you have to disconnect the external receiver and take off the solder on bridge [+].
REMOVE THE MODIFY BEFORE TO GIVE 24V TENSION!

PICTURES

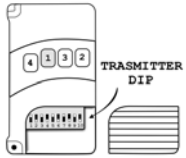



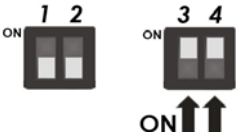

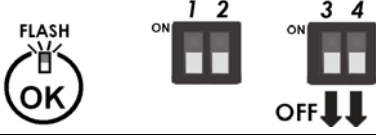

RADIO EXTERNAL RECEIVER PROGRAMMING

BASE PROGRAM	OUTPUT FUNCTION:	Manual
	BASE RADIO CODES:	Standard transmitter 53200

The radio external receiver has a BASE program (factory code). You can have the base program every time you make a RESET procedure.

Button n. 1
Dip code:
1,3,5,7,9 in ON position
2,4,6,8,10 in OFF position



RESET PROCEDURE	PROCEDURE	PICTURES
<p>The RESET procedure allows to come back to the base program and erase all programs memorised and radio codes.</p> <p> <i>With the Reset procedure you can back to the Base program (factory code) (Standard transmitter 53200, button 1, dip 1,3,5,7,9 in OFF position and dip 2,4,6,8,10 in ON position)</i></p>	<p>1) Turn off the external receiver and set the dip 3 and 4 [FUNC] in ON position.</p>	<p>TURN OFF THE BOARD</p> 
	<p>2) Turn on the external receiver. The OK led flashes fast signalling the RESET procedure .</p>	<p>TURN ON THE BOARD</p> 
	<p>3) When the OK led flashes slowly , set the dip 3 and 4 in OFF position.</p>	<p>FLASH OK</p> 
	<p>4) When the OK led turns off it means that the RESET procedure is finished.</p>	<p>LED OFF</p> 

RADIO COMMANDS The external receiver's memory has n. 77 standard-codes and n. 29 Rolling-codes, if you add an external memory you have n. 5325 standard-codes and n. 1997 Rolling-codes (see pag.7). The Base code is (standard 53200, button 1, dip 1,3,5,7,9 in ON position and dip 2,4,6,8,10 in OFF position) . The Base code is automatically erased with the first code memorised.



ROLLING-CODES ! If the first code memorised is type Rolling-code , the reception of standard-codes 53200 (10 dip) is excluded.

If you want the standard-codes 53200 you have to make the reset procedure (see pag.3).

TRANSMITTERS PROGRAMMING ! When you program radio codes you have to respect a distance of 50cm between transmitter and receiver.

PERSONAL CODE ! If you use the transmitters with standard-codes (10-dip) you have to choose a code, changing the 10 dip position as you want on the transmitter.

When you have chosen a code you have to memorise on the receiver .

When you have memorised on receiver you CAN NOT change the code transmitter !

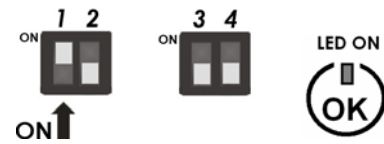
RADIO CODES PROGRAMMING (CH1)

Radio code for CH1 output

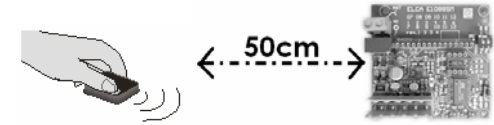
PROCEDURE

1) Set the dip 2,3 and 4 in OFF position then the dip 1 in ON position. The OK led flashes for 2 sec. (see pag5) then it turns on fixed.

PICTURES



2) Send the radio code that you want memorise.

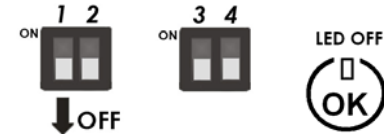


3) The OK led flashes fast 1 time if the code is memorised or it flashes slowly 1 time if the code is just in memory. (If the OK led flashes 3 times, it means that the memory is full and you can't memorised other radio codes)



1 fast flash: the code is memorised
1 slow flash: the code is just in memory

4) If you want to memorise other radio codes SS repeat from point 2 or set again the dip 1 in OFF position.



TO ERASE A RADIO CODE

This procedure erases a single radio code.



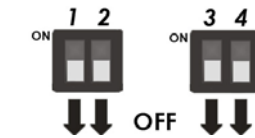
TO ERASE ALL RADIO CODES.

It's possible to erase all radio codes in memory making the Reset procedure, see pag 3.

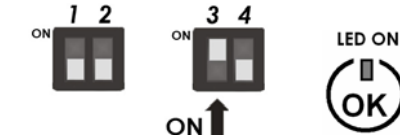
PROCEDURE

1) Set the dip 1,2,3,4 in OFF position

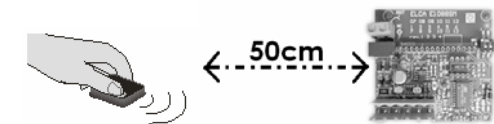
PICTURES



2) Set the dip 3 in ON position. The OK led OK turns on.



3) Send the radio code that you want erase.

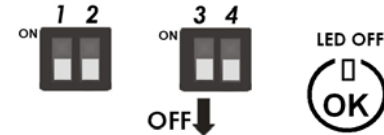


3) The OK led flashes 3 time if the radio code has been erased or it flashes slowly 1 time if the radio code is NOT in memory.



3 flash: the code is erased
1 slow flash: the code is NOT in memory

4) If you want erase other radio codes , repeat from point 2 or set the dip 3 in OFF position



FUNCTIONS

The external receiver mod. MINIPLUTO2 has 3 kinds of output :

MANUAL : The output is active when the transmitter's button is pushed

SINGLE-STABLE: The output is active every time you send a radio code.

FLIP-FLOP : Every time you push a transmitter's button, the output is ON or OFF.



When you change the function DON'T SEND radio-codes. If you send radio codes they will in memory.

PROCEDURE

1) Set the dip 2, 3, 4 in OFF position and then Set the dip 1 in ON position

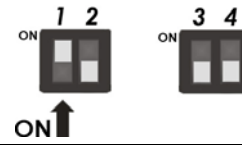
2) The OK led signals which function is active for 2 sec. then it turns on fixed.

3) To change the function set the dip 4 in ON position then in OFF position. Every time you set the dip 4 in OFF position the OK led flashes for 2 sec.

4) Repeat the point 3 until the OK led signals the function you want.

5) When you have the function set the dip 1 in OFF position.

PICTURES



The OK led flashes for 2 sec.

FAST FLASHES



manual

FIX ON



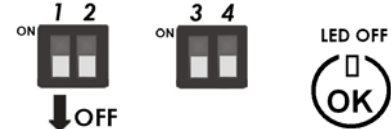
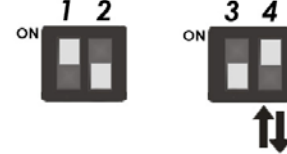
single-stable

SLOW FLASHES



flip-flop

To change the function set the dip 4 in ON position, then in OFF position



TIME FOR SINGLE-STABLE OUTPUT

Whit this procedure you can chose the time for the single-stable function.

The time can be programmed from 1sec to 30min.

PROCEDURE

1) Set the dip1, 2, 3, 4 in OFF position.

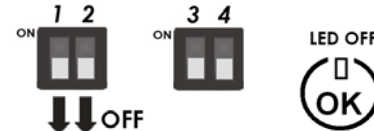
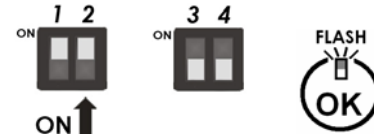
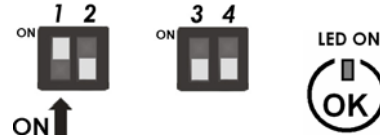
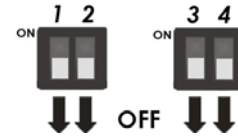
2) Set the dip 1 in ON position. The OK led signals for 2 sec. which function is active then it turns on fixed.

3) Set the dip2 in ON position. The OK led flashes to signal that the receiver is memorising the time for the single-stable function

4) Wait for the time that you want to memorise

5) Set again the dip2 in OFF position. The OK led turns on fixed. Set again the dip1 in OFF position. The OK led turns off.

PICTURES



PROGRAMMING BY RADIO

You can program a radio code by the transmitter without setting any switch on the receiver

If you want memorise more codes you have to repeat the procedure .

This function is possible only with Rolling-Codes

The procedure doesn't function if there is the block function (see pag.6).

PROCEDURE

You can use this procedure only with rolling-codes

1) Send rolling-code by Iris RC transmitter that is just in memory.

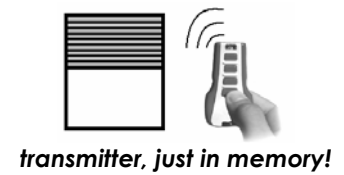
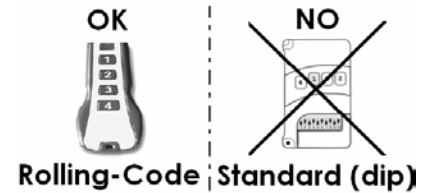
2) Within 8 sec. push together the buttons 1 and 3 of IRIS RC transmitter used at the point1

The external receiver is in program.

3) Within 8 sec. send a NEW CODE (type rolling-code).
If you don't send any new code the external receiver exits from the program after 8 sec.

4) Check the new code memorised is correct or repeat the procedure.

PICTURES



MEM <<



BLOCK FUNCTION


Whit this function the technician can enable or disable the programming function.

The technician can memorise a radio code to block/unlock the external receiver.

PROCEDURE

1) Turn off the external receiver and sold the bridge JA


2) Turn on the external receiver and program a radio code (see pag.4)

 *ONLY the first code memorised has the block function*

When you send the block code the OK led flashes:

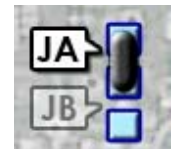
3 SLOW flash . . . DISABLE PROG.

3 FAST flash ENABLE PROG.

 *To disable this function: turn off the receiver, no solder the bridge X and turn on the receiver.*

PICTURES

TURN OFF THE BOARD



TURN ON THE BOARD



EXTERNAL MEMORY

If you add an external memory on the receiver, the radio codes memory became:

- From n. 77 standard -codes to n. 5325 standard-codes
- From n. 29 Rolling-codes to n. 1997 Rolling-codes

The external memory excludes the internal memory it means that the radio codes just in memory don't function anymore.

If you want the same codes just in memory follow the procedure INT >> EST, see pag {7}.

OPERAZIONI

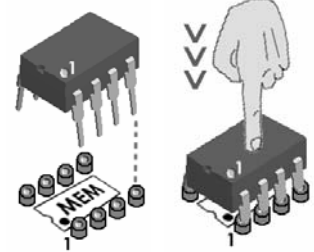
1) Turn off the board and put the external memory 8 pin [MEM] on the socket, pay attention to:

YOU MUSTN'T:

- Keep in contact the external memory with water.
- Fell down the external memory
- Keep in contact the external memory with electromagnetic fields or high temperature

Respect the component's polarity. See the figure.

2) Put the external memory on the receiver. Pay attention to the memory's pin. Don't bend the pin



Before to memorise the new radio codes, make the copy from the internal memory to the external (see pag 7). or erase all radio codes (see pag 3).

MEMORY'S COPY INT. >> EST

You can use this function only if there is an external memory.

This procedure allows to recover the codes memorised on the internal memory.

OPERAZIONI

Turn off the receiver and solder the bridge JB.

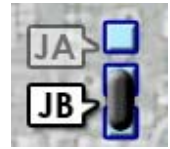
Turn on the receiver. The OK led flashes fast.

Wait that the led has a fixed light (60sec)

Turn off the board, take off the jumper
The memory's copy is finish.

IMMAGINI

TURN OFF
THE
BOARD



TURN ON
THE
BOARD



TURN OFF
THE
BOARD



LED

The external receiver mod. MINIPLUTO2 has 3 led. The led are important to check in fast way if the connections are wrong or if there are faults.

LED	STANDARD CONDITION	FUNCTION
ON	LED ON 	It signals the alimentation. If it's turn off means the receiver has not alimentation
CH1	LED OFF 	It signals the CH1 output. When the output relay is active, the OK led turns on.
OK	LED OFF 	When the receiver turn on it flashes to signal which functions is active Fast flash = manual, Slow flash = flip-flop, No flash = single-stable In standard function it flashes when receives a radio code When you change the dip position, it flashes 1 time fast to confirm. If the OK led is always turns on or it always flashes that means it's making the programming (dip 1, 2, 3 or 4 in ON position) (see page from 3 to 7).

